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U. S. Department of Agriculture - Forest Service
CENTRAL STATES FOREST EXPERIMENT STATION

Technical Note 47.

November 15, 1941

VOLUME TABLE 1/
for
AMERICAN SYCAMORE
(*Platanus occidentalis*)

Belmont, Holmes, Knox, Lawrence, Pike and Richland Counties, Ohio

Merchantable Stem to a Variable Top Diameter INTERNATIONAL Rule ($\frac{1}{4}$ " Kerf)

| Diameter breast high outside bark (inches) | Gross volume of stem in 12.3-foot logs to merchantable height | | | | | Top d.i.b. at merchantable limit | Basis in trees |
|-----------------------------------------------------|------------------------------------------------------------------|-----------|-----------|-----------|-----------|-------------------------------------------|----------------------|
| | 1 log | 2 logs | 3 logs | 4 logs | 5 logs | | |
| | Bd.ft. | Bd.ft. | Bd.ft. | Bd.ft. | Bd.ft. | Inches | Number |
| 9 | 19 | 36 | 51 | | | 6.6 | 16 |
| 10 | 24 | 45 | 65 | 84 | | 7.0 | |
| 11 | 30 | 56 | 80 | 104 | | 7.4 | 47 |
| 12 | 36 | 68 | 97 | 126 | | 7.8 | |
| 13 | 43 | 81 | 116 | 151 | | 8.1 | 21 |
| 14 | 51 | 96 | 137 | 178 | | 8.6 | |
| 15 | 58 | 111 | 160 | 208 | | 9.0 | 17 |
| 16 | 69 | 129 | 185 | 240 | 294 | 9.4 | |
| 17 | 79 | 147 | 212 | 275 | 336 | 9.8 | 31 |
| 18 | 90 | 168 | 241 | 313 | 382 | 10.3 | |
| 19 | 101 | 189 | 272 | 353 | 432 | 10.8 | 13 |
| 20 | 114 | 212 | 305 | 395 | 483 | 11.3 | |
| 21 | | 237 | 340 | 442 | 540 | 11.8 | 11 |
| 22 | | 262 | 378 | 490 | 598 | 12.3 | |
| 23 | | 290 | 417 | 541 | 661 | 12.8 | 10 |
| 24 | | 319 | 459 | 596 | 728 | 13.4 | |
| 25 | | 349 | 502 | 652 | 796 | 14.0 | 11 |
| 26 | | 381 | 548 | 711 | 869 | 14.6 | |
| 27 | | 415 | 597 | 774 | 946 | 15.4 | 3 |
| 28 | | 450 | 647 | 840 | 1026 | 16.1 | |
| 29 | | 486 | 700 | 908 | 1109 | 16.9 | 1 |
| 30 | | | 755 | 980 | 1197 | 17.7 | |
| 31 | | | 813 | 1054 | 1288 | 18.6 | 2 |
| 32 | | | 873 | 1132 | 1384 | 19.4 | |
| Basis in trees-- number | 26 | 39 | 64 | 52 | 3 | -- | 183 |

1/ Trees measured by J. W. Girard in 2-inch diameter classes and in 10- to 16-foot log lengths above a 1-foot stump and scaled as such. Table prepared in 1941 by the equation method. Coefficient of multiple correlation (R) is .938. The band of the standard error of estimate is 84.5 to 116.8 percent. Block shows limits of basic data.

The total estimated gross volume of single sycamore trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the cull elements and through local experience of millmen as regards losses from rot, shake, etc., in utilizing this species.

R. E. Emmer

